ESTIMATION EXAMPLE

DEPT of TRANSPORTATION

0% Systems Fixed on AUG 15
2% Systems Fixed on NOV 15
2% in ONE QUARTER

50 **QUARTERS TO 100% DONE**
That is the YEAR 2010

if double rate, then: 25 quarters
BUT only 8 quarters left to deadline

TOO OPTIMISTIC because:

some still assessing systems (FAA)
missing systems being replaced
missing second-tier systems
missing embedded chips

ESTIMATED LATE COMPLETION DATES

2000, early	**National Air and Space Admin**
2000, mid	**Federal Emergency Mgmt Agenc**
2000, mid	**Agency for Internat'l Development**
2000, mid	**Education**
2001	**Justice**
2001	**Health and Human Services**
2002	**General Services Administration**
2004	**Treasury**
2005	**Agriculture**
2010	**Office of Personnel Management**
2010	**Transportation**
2012	**Defense**
2019	**Labor**
2019	**Energy**

Assumes (1) mission-critical systems only
(2) accurate self-reported agency data

(3) current rate of progress continues

TALKING POINTS

DEFINE YEAR 2000 PROBLEM
- Date represented as 2 digits

PREVIOUS SUBCOMMITTEE WORK
- April 16, 1996 first hearing

SIMPLE GOAL -- GET THE JOB DONE
- Management not technical problem

ESTIMATED COMPLETION DATES
- calculations reveal 10 agencies will finish on time
- but 14 agencies will be late
  - late agencies are large ones with about 60% of the systems
- 5 agencies will be very late

PUT UP CHART 1
- talk about GOOD agencies on the top of the chart

PUT UP CHART 2
- talk about BAD agencies that will finish late
- examples of what being late might mean
  - OPM government employees pensions and benefits
  - DOT potential grid-lock at airports
  - Defense vendors do not get paid
  - Labor
  - Energy
- interconnected systems may make problems for others
  - example: assume SSA gets its systems fixed
    however, SSA issues checks via Treasury
  - example: one of 50 state systems passes dirty data to Fed
  - example: one of hundreds of countries passes dirty data

PUT UP CHART 3

Easy example of how we estimated completion dates

Transportation

0% complete in August 15 quarterly report

2% complete in November 15 quarterly report

hence, rate is 2% per quarter

therefore, 50 times 2 = 100%, or 50 quarters to finish

that works out to year 2010

Assume Transportation doubles its productivity to 4% per quarter

therefore, 25 quarters to finish (4 x 25 = 100%)

However, only 8 quarters left

Transportation must complete more than 12% per quarte

that is six times Transportation's current rate

REMAINING BIG PROBLEM

estimate completion dates are actually too optimistic

because

omitted mission-critical systems BEING REPLACED

omitted entire second and third tiers of systems

omitted embedded chips

and

some agencies like FAA are still AESSESSING

FAA has 245 mission-critical systems still being assesse

RECOMMEND 3 PIECES OF THE SOLUTION
STILL NEED MORE PIECES, NOT SUFFICIENT, BUT NECESSAR

1. clean up current agency quarterly reports to OMB
- **do not add up**
- **agencies leave key fields blank**
  - **like EPA "forget" its scheduled completion dates**
- **categories not consistently used by agencies**
- **etc**
- **etc**

point is not to make petty work for bureaucrats
- **Transportation can not tell how FAA is doing**
- **OMB can not tell how Transportation is doing**
- **Congress can not tell how all agencies are doing**

2. add more relevant information to agency quarterly reports
- **add mission-critical systems BEING REPAIRED**
- **add second tier of "BUSINESS-CRITICAL" systems**
- **add embedded chips**
- **add contingency plans**
- **add a DAY ONE PLAN**
- **etc**
- **etc**

again, point is not to have reports for reports sake, rather
- **make total amount of work to be done visible**
- **make plans more complete**
- **make estimates more realistic**

3. call again for CZAR for YEAR 2000 problem
- **somebody at Cabinet level OR ABOVE**
- **not sufficient for whole problem but necessary piece**

WANT TO WORK WITH OMB, CIO COUNCIL, AGENCIES, INDUSTRY, ANYBODY AND EVERYBODY TO FIX THIS PROBLEM.

RIPPLE EFFECT

Like throwing a stone in a pond.
The ripples expand, wave after wave.

Computer systems are connected.
Which are in turn connected to more systems
Layer after layer in a network.

When any one computer dies it can take out
its neighbors, who take out their neighbors.
Like a ripple. Wave after wave.

Like the great New England black-out in the
70’s. One failure took out the whole network.

Airport systems are connected to pass a
cross-country flight from region to region.
Plus, of course, the airport systems are
connected to the airlines systems.

YEAR 2000 PROGRESS

Mission Critical Systems ONLY of Federal Departments and Agencies

NOVEMBER 15, 1997	ASSESSMENT COMPLETED PERCENTAGE	RENOVATION COMPLETED PERCENTAGE	TESTING COMPLETED PERCENTAGE	ANY IMPLEMENTATION PERCENTAGE	ESTIMATED COMPLETION
SSA Social Security Administration	100%	80%	74%	80%	1999
NSF National Science Foundation	100%	50%	42%	0%	1999
SBA Small Business Administration	100%	63%	60%	59%	1999
EPA Environmental Protection Agency	100%	50%	40%	40%	1999
Interior Department of the Interior	96%	41%	37%	29%	1999
VA Department of Veterans Affairs	90%	61%	38%	25%	1999
NRC Nuclear Regulatory Commission	100%	25%	25%	25%	1999
HUD Department of Housing and Urban Development	100%	45%	27%	22%	**1999***
State Department of State	100%	25%	25%	0%	1999"
Commerce Department of Commerce	100%	30%	23%	22%	**1999***
FEMA Federal Emergency Management Agency	100%	29%	29%	21%	2000
NASA National Aeronautics and Space Administration	100%	14%	11%	11%	2000
AID Agency for International Development	95%	8%	8%	8%	2000
Education Department of Education	100%	20%	0%	0%	2000
HHS Department of Health and Human Services	100%	35%	20%	15%	2001
Justice Department of Justice	100%	18%	11%	6%	2001
GSA General Services Administration	100%	25%	18%	17%	2002
Treasury Department of the Treasury	80%	44%	8%	8%	2004
Agriculture Department of Agriculture	100%	12%	6%	7%	2005
OPM Office of Personnel Management	100%	9%	0%	0%	2010
DOT Department of Transportation	80%	9%	5%	2%	2010
DOD Department of Defense	93%	44%	16%	2%	2012
Labor Department of Labor	100%	16%	12%	7%	2019
DOE Department of Energy	100%	13%	11%	4%	2019

NOTES

The estimated completion dates are based on current agency reported progress rates.
The departments and agencies are responsible for the accuracy and consistency of percentages reported.

* Warning: projections may be overly optimistic.